

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference JVW/6862/0101	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No PCT/IB2005/000187	International filing date (day/month/year) 26/01/2005	(Earliest) Priority Date (day/month/year) PCT/IB2005/000187 (P) 26/01/2005
Applicant UNIVERSIDAD AUTONOMA DE MADRID		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report

**1 Basis of the report**

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b))

- b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I

2. ☐ Certain claims were found unsearchable (See Box II)

3. ☐ Unity of invention is lacking (see Box III).

- 4 With regard to the title,

☒ the text is approved as submitted by the applicant

☐ the text has been established by this Authority to read as follows:

- 5 With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

- 6 With regard to the drawings,

- a the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b ☒ none of the figures is to be published with the abstract

Form PCT/ISA/210 (first sheet) (January 2004)

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	FERNÁNDEZ JOSE LUIS ET AL: "The sperm chromatin dispersion test: a simple method for the determination of sperm DNA fragmentation." JOURNAL OF ANDROLOGY. 2003 JAN-FEB, vol. 24, no. 1, January 2003 (2003-01), pages 59-66, XP008052005 ISSN: 0196-3635 cited in the application	1,2,7-14
Y	the whole document	3-6,15
X	US 5 801 058 A (BLANCO-ESTEVE ET AL) 1 September 1998 (1998-09-01)	1-9,14, 15
Y	the whole document	11-13
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☒ Further documents are listed in the continuation of box C

☒ Patent family members are listed in annex

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

\*&\* document member of the same patent family

Date of the actual completion of the international search

6 September 2005

Date of mailing of the international search report

19/09/2005

Name and mailing address of the ISA

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Botz, J

## C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	ANKEM MURALI K ET AL: "Novel assay for determining DNA organization in human spermatozoa: Implications for male factor infertility" UROLOGY, vol. 59, no. 4, April 2002 (2002-04), pages 575-578, XP002343631 ISSN: 0090-4295	1,2,7-14
Y	the whole document	3-6,15
X	MARTINEZ-PASTOR F ET AL: "Use of chromatin stability assay, mitochondrial stain JC-1, and fluorometric assessment of plasma membrane to evaluate frozen-thawed ram semen" ANIMAL REPRODUCTION SCIENCE, vol. 84, no. 1-2, August 2004 (2004-08), pages 121-133, XP002343632 ISSN: 0378-4320 cited in the application page 124, paragraph 2.5	1-10,14, 15
X	FERNANDEZ J L ET AL: "DNA breakage detection-FISH (DBD-FISH) in human spermatozoa: Technical variants evidence different structural features" MUTATION RESEARCH, vol. 453, no. 1, 20 September 2000 (2000-09-20), pages 77-82, XP008052017 ISSN: 0027-5107 cited in the application	1-6,10, 14,15
Y	the whole document	11-13
X	MURIEL LOURDES ET AL: "Structure of human sperm DNA and background damage, analysed by in situ enzymatic treatment and digital image analysis." MOLECULAR HUMAN REPRODUCTION. MAR 2004, vol. 10, no. 3, March 2004 (2004-03), pages 203-209, XP008052031 ISSN: 1360-9947	1-6,10, 14,15
Y	the whole document	11-13
X	SZCZYGIEL MONIKA A ET AL: "Combination of dithiothreitol and detergent treatment of spermatozoa causes paternal chromosomal damage." BIOLOGY OF REPRODUCTION. NOV 2002, vol. 67, no. 5, November 2002 (2002-11), pages 1532-1537, XP002343633 ISSN: 0006-3363	14,15
Y	the whole document	3-6
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	<p>LABETA M O ET AL: "SOLUBILIZATION EFFECT OF NONIDET P-40 TRITON X-100 AND CHAPS IN THE DETECTION OF MHC-LIKE GLYCOPROTEINS" JOURNAL OF IMMUNOLOGICAL METHODS, vol. 112, no. 1, 1988, pages 133-138, XP002343634 ISSN: 0022-1759 the whole document</p> <p>-----</p>	3-6,15
Y	<p>SOTOLONGO BARBARA ET AL: "Ability of hamster spermatozoa to digest their own DNA." BIOLOGY OF REPRODUCTION, vol. 69, no. 6, December 2003 (2003-12), pages 2029-2035, XP002343635 ISSN: 0006-3363 the whole document</p> <p>-----</p>	3-6,15

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5801058	A	01-09-1998	FR	2721405 A1	22-12-1995

Form PCT/ISA/210 (patent family annex) (January 2004)

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